

the humerus, the shoulder is not kept at rest for a sufficient time to allow of the acromial fragments uniting by bone, and as a consequence a false joint forms. When the blow which produced the fracture was sufficiently severe to contuse the articular cartilage of the head of the humerus, and the intervening soft parts, the changes I have just described follow.

Anatomists are largely responsible for the non-recognition of these fractures, since they have chosen to regard the resulting ununited conditions as examples of non-union of an epiphysis, and, so far as I can see, upon no reliable evidence whatever. Some surgeons have readily accepted the statements of the anatomists, apparently without investigating them. They have, however, observed the frequent association of this so-called ununited epiphysis with the presence of so-called rheumatoid changes in the shoulder-joint, and have explained the cause of their association in various ways. One has gone so far as to assert that in cases of chronic rheumatoid arthritis of the shoulder-joint, a disunion of the acromial epiphysis from the rest of the bone takes place. Such a statement hardly calls for criticism, and I only mention it to indicate the frequency with which those changes which the pathologist regards as characteristic of the disease, rheumatoid arthritis of the shoulder-joint, are found associated with ununited fracture of the acromion. Can anything be more obvious and simple than the mode of development of an ununited fracture of this process of the bone, if one considers for one moment its position and muscular attachments, together with the difficulty of retaining the broken fragments at rest for any length of time, even if the fracture be recognised? The only two examples of bony union which I have observed followed a fracture of the acromion, which was accompanied by a severe comminuted fracture of the upper end of the humerus. Owing to the pain resulting from the presence of the latter fracture, the shoulder was kept at rest sufficiently to allow of bony union. Though I might multiply such instances indefinitely, I think I have said enough to show that a severe injury to a joint is liable to be followed by the development of such pathological conditions as surgeons are still accustomed to regard as evidence of the presence of rheumatoid arthritis.

ABDOMINAL SECTION: 21.

GENERAL OBSERVATIONS ON DETAILS AND AFTER-TREATMENT.

BY

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Two years ago I contributed to this Journal a few notes on the feeding of patients after abdominal section.* In conclusion I observed that full attention to after-treatment is one of the best ways to attain successful results. I admitted that it is at first less interesting to contemplate than the question of antiseptics, short incision and drainage, but it is quite as important.

Further experience has not led me to modify my practice in respect to diet and the management of the patient's bowels. I believe rather more than I did in 1894 in the value of nutrient enemata as compared with starving, or early feeding by the mouth. They counteract shock, and nourish without causing flatulence. No irritation of the bowel need be feared if the most ordinary precautions be taken. Later on, if symptoms of obstruction or peritonitis set in, these enemata are of yet higher value. I find that, if mixed with a little lime-water, milk is not so objectionable an article of diet as I once thought it to be. A few ounces daily, after the second day, aid greatly in keeping up nutrition, especially in old women, and if not given pure or in excess, the fear of the development of scybala is not great. A dose of sulphate of soda, citrate of potash, and glycerine dissolved in water may be given two or three times daily from the fourth to the sixth day in constipated subjects, or in cases where the passage of solid motions might be dreaded for special reasons. About twenty grains of the sulphate of soda are sufficient as a rule. The citrate must not be given unless the urine is concentrated and charged with urates, or that excretion will become alkaline. After two days' treatment with this draught, an enema will bring away a semi-liquid motion or soft solid feces without trouble.

I still find the enema greatly preferable to pills

* "On the Feeding of Patients after Abdominal Section," Vol. III., 1893-4, p. 346.

and aperients in simple cases, and also in very bad cases, where any extra irritation of the stomach and upper part of the intestinal tract should be avoided. On the other hand, I continue to give aperients when the patient is evidently suffering from the constipation alone, or from the diet disagreeing with her. Headache, furred tongue, and distinct loss of appetite, with no grave abdominal symptoms, require treatment beginning in the upper part of the alimentary canal.

Diet is one of the most important of the numerous matters of detail on which the patient's life and comfort depend. There remain many others, some of which may be profitably discussed.

The length of the abdominal incision is a matter of some importance, and I find that the practice of different surgeons varies in this respect. Before Sir Spencer Wells succeeded in establishing ovariotomy as a justifiable operation, long wounds were made, and the tumour was hastily pulled out. He showed how a cyst could be tapped through a short incision, and extracted at leisure afterwards. The clamp did not necessitate enlargement of the wound. When the ligature came into vogue, it was found that the pedicle could, as a rule, be easily and safely secured through a short wound. So far experience favours the short incision. I seldom make the wound longer than three inches in the case of a non-adherent cyst. Many large tumours can be extracted through a two and a half inch incision, and the pedicle secured without any bruising of the wound. I have never had reason to regret this practice.

Unfortunately, this is an age of record-beating, and one or two surgeons have boasted too much of their short incisions. When deep manipulations are required, or when the tumour is firm, the wound may get badly bruised by the surgeon's hands, or by the pressure of forceps, or by the tumour during its extraction. In operations where the abdomen is not distended, the incision should be made at least three inches long at once. Otherwise the recti may become severely bruised. When suppurating tubes or dermoids are removed, a bruised wound is particularly liable to suppurate.

The surgeon must never be ashamed of enlarging the wound if necessary. I feel sure that one reason why a wound is often made long from the first is the fear that it "looks bad" to make the incision longer during operation. This is a

most unsurgical principle. There is but one sound rule concerning the abdominal incision. It should be made as long as appears necessary, and if, during the course of an operation, it is found to be too short to allow of manipulations without damage to its edges, it must be made larger. Long incisions are specially needed in cases where obstructed or diseased intestine requires to be searched for and examined.

The suture question remains unsettled. I prefer silkworm gut to silk. If properly softened in water before the operation, and not tied too tightly, the gut will not cut through the tissues of the abdominal wound. In fat subjects, especially after hysterectomy and application of the *serre nœud*, I find that it is best to suture the peritoneum separately. In other cases, a single set of sutures passing through all the layers answers perfectly. I have examined the cicatrices of abdominal incisions from two to ten or eleven years after I had made them, and found them perfectly strong. Novices often wonder why some of the stitch tracks suppurate, as they have taken every precaution to render the sutures aseptic. The truth is that the inexperienced hand is often rough, and the suppuration is due to the passage of sutures through tissues bruised by the hands or by instruments.

It is certain that the peritoneum must not be transfixd by the suture-needle too far from its cut edge, especially when all the layers of the wound are included in the suture. If over one-eighth of an inch be taken upon each side, two broad surfaces of serous membrane will project forward lying in apposition between the more superficial layers. This will effectually prevent the union of those layers. In a thin wound the edges of the serous membrane may, after the tying of the sutures, lie level with the surface of the abdomen, if too much peritoneum be taken up by the needle. I observed this condition once in one of my own operations, and immediately withdrew the one suture which had been entered too far from the edge of the peritoneum, and passed it in again nearer to the edge. It is evident that if this mistake be not rectified a hernial pouch will most certainly develop. Hernia of the cicatrix is an intolerable nuisance to the patient, and may cause her more trouble than did the successfully removed tumour. Believing no longer in surgery,

she is apt to delay till the hernia becomes very large, and full of diverticula. I have had to operate for the radical cure of a hernia of this kind. The operation is always difficult, and never free from danger. Omentum and intestine usually adhere, more or less firmly, to the serous lining of the diverticula or, worse still, to the fibrous neck of the sac. It must be remembered that this ugly complication is often due not to neglect on the part of the operator, but to the patient's carelessness about wearing the belt after convalescence.

As it is so important to avoid hernia, there are precautions which it is advisable to take when the sutures are removed. The precise date can only be determined by common-sense surgical principles. I find that when the incision is properly dressed at the operation it may be left alone for a week. Then half the sutures should be removed. When a very large tumour has been taken away the parietes will still be found flaccid, and the strain on the edges of the wound will be trifling; though the operator must beware of flatulent distension. In the contrary condition, where there was little previous distension, the muscular layers remaining strong and unstretched, the strain on the wound will be considerable. In any case the abdominal walls should be well supported by strapping and bandaging after the removal of the sutures. On the ninth or tenth day the remaining sutures should be taken away. An assistant must press with his hands on the parietes during this dressing, and continue to do so till the strapping has been applied. Then the abdomen is once more bandaged. In this manner the new cicatrix is protected from all straining. The surgeon must not forget, however, that flatulent distension is a powerful mechanical agent in stretching the wound. For this reason an abdominal binder should be put on by the patient at night for several months after she has worn the belt during the daytime; besides, all causes of flatulence must be avoided.

I find that it is advisable to use strapping from the first, since it is more reliable than the bandage and padding alone. At first, it protects the walls against the evil effects of chloroform-sickness, and then, as well as later, it supports the wound, promoting firm cicatrization. Loose bandaging and inefficient strapping allow of flatulent distension,

a source of grave peril during the early days after operation, and, later on, a cause of the awkward complication already noted.

The temperature is a serious matter. Here there has been too much record-beating, and I have heard surgeons boast that they "never have temperatures." An honoured authority goes so far as to say: "If I had to deal with a temperature above 104° lasting for more than two hours, I should administer a full dose of antipyrin, and possibly supplement it with sponging of the cutaneous surface." * This passage in a well-known work is, in the experience of many surgeons, open to grave criticism. A temperature above 104° , lasting for more than two hours, represents conditions not improved by antipyrin. The much-abused ice-cap is far more comforting to the patient than sponging. If properly adjusted it not only makes the temperature fall, but often promotes sleep after distressing restlessness. The surgeon must never forget that when he cannot remove the source of the high temperature, the high temperature is all the more an evil in itself.

A rise of temperature with but little quickening of the pulse and no distension, retention of flatus or vomiting, often means, during the first few days, the coming on of menstruation, especially when the catamenia appear before they are due. The same symptom in the second or third week usually implies the presence of scybala retained in the large intestine. Low temperature and high pulse are commonly associated when intestinal obstruction from purely mechanical causes is present. Sepsis in any form involves more or less rise of temperature. This fact is the true reason why high temperatures are dreaded, and why men boast that they have "no temperatures." Every surgeon must avoid that evil state of mind which tempts him to believe and to state that other men lose their patients from sepsis, whilst his own scanty mortality is due to unavoidable and purely accidental causes.

A rapid pulse without other bad symptoms is occasionally seen, and is sometimes a neurosis. In one instance in my practice, where the patient was an anæmic girl, it simulated hæmorrhage, of which, however, no other signs were present, and on the second day the pulse was normal. A cyst con-

* J. Greig Smith, "Abdominal Surgery."

taining much fluid had been removed, but rapid pulses do not necessarily follow the removal of large tumours. In a case of hysterectomy the pulse became alarmingly frequent. I had used iodoform freely as a dressing for the stump of the pedicle. Directly I discarded that compound the pulse fell, and gave me no further anxiety.

What I presume to be a true neurotic pulse may be noted when a patient is in dread of the dressing of the abdominal wound, or is worried or excited by relatives. The rise of pulse or temperature after a visit from friends may mean more than a neurosis. The patient may have moved about, or taken improper food, and thus set up local mischief.

In conclusion, the patient's life and comfort depend on a scrupulous attention to matters of detail at and after abdominal section. These matters must be clearly understood by the operator. He must not make too little or too much of cardinal symptoms; above all, he must not look upon them as a special credit or disgrace to himself. They are guides to the patient's condition. To save the patient and prevent sequelæ is not sufficient. The surgeon must do his utmost to make her as comfortable as possible during the critical two or three weeks which follow the operation which he has undertaken.

CASES DEMONSTRATED AT THE CLINICAL MUSEUM.

BY

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Reported by J. T. CONNER, M.D.

Two Cases of Kaposi's Disease (Xeroderma Pigmentosum).

THE first was a man, æt. 21, brought by Mr. J. Startin. Since he was two years old he was liable to blisters. His face was freckled, and stigmata were also present. The skin here, as well as on the neck, was tight, and ulcerated in places. There was a general condition of xeroderma (congenital). On the palms the skin was dry and thick. He had lost all his nails. The

legs were red and inflamed. There were symmetrical bullæ on the knees and shins. No freckles could be seen on the arms or legs. He stated that when his skin was rubbed, blisters were produced easily. The teeth were broken and decayed. His brother was much freckled, and his sister a little.

The second was a girl, æt. 8, sent from St. Bartholomew's Hospital by Mr. Willett. She had been freckled since she was two years old. The face and neck were thickly covered (much more so than in the first case). Here and there were small ulcers, with brownish crusts. On the arms the pigment shots reached as high as the elbows, and the palms were affected as well as the backs of the hands. The skin of the legs was morbidly dry. A few freckles were to be seen on the backs of the legs, reaching as high as the popliteal spaces. There was no general condition of xeroderma, and the nails were good. The conjunctivæ on the lids was red and inflamed.

Remarks.—Mr. Hutchinson thus explained the pathogenesis of this complaint. It is a "family disease"; that is to say, it affects certain of the children born of healthy parents, while others are exempt. Retinitis pigmentosa belongs to the same class. In the one case the subject is born with a skin, and in the other with a retina, which "does not wear well"—it is unduly sensitive to light.

The reaction produces an abnormally pigmented skin or retina, as the case may be. But he had never known the two conditions to exist in the same patient. The freckles first affect the parts exposed to light—face, arms, and legs. But the process is an aggressive one; so they spread to unexposed parts—upper arms, thighs, and clavicular regions. Also the irritation leads not only to pigmentation but to inflammation. The vessels dilate, stigmata are formed. Ulceration of a lupoid type occurs. Like lupus, this ulceration in its turn produces cancer.

He objected to the name of xeroderma pigmentosum, as xeroderma was usually absent, and when present only a coincidence.

Prurigo Hyemalis.

A man, æt. 26, sent by Mr. Waren Tay, had suffered from attacks of this disease, in winter,